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## 9 Supplementary Tables

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Supplementary Table S1 *m/z* values of compounds located in large peltate trichomes of leaves of *S. barbata*, together with tentative identification of some based on accurate mass and MS2 data from methanolic extracts of trichomes. *m/z* values of compounds identified in medium and small leaf trichomes and in stem trichomes.

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MALDI Imaging summary Peltate Trichome Type	MALDI signals	Likely identity of clerodanes
Peltate Trichome Type Present in large peltate trichomes 49 compounds (15 clerodanes + 34 other compounds)	signals 591.19 592.19 598.2 595.21 656.24 498.20 315.08 351.13 345.09 558.22 559.2 559.2 561.2 577.24 596.19 552.19 536.18 594.21	Scutehenanine H Scutebata M? Scutelinquanine B Scutebata M? Scutebarbata O Dihydroxydimethyl flavone 2α-hydroxydeacetyl ajugarin Dihydroxytrimethoxy flavone Scutebarbatine Y Scutebarbatine A Barbatin B 6-O-nicotinoylscutebarbatine G Scutebarbatine L 6-O-(2-oxo-3-methylbutanoyl) scutehenanine A?
Present in medium and small peltate trichomes only, 9 compounds (4 clerodanes + 5 other compounds)	516.17 514.14 551.16 562.17 490.14 515.16 550.16 654.25	Scutebarbatine I Scutelinquanine A
Stem peltate trichomes	550.14 627.15 495.13	

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